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TECH CENTER 1600/2900



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/782,130

DATE: 11/04/2002
TIME: 13:28:08

Input Set : A:\seqlst.txt
Output Set: N:\CRF4\11042002\I782130.raw

3 <110> APPLICANT: KNAUF, VIC C.
4 KRIDL, JEAN C.
6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR REGULATED TRANSCRIPTION
7 AND EXPRESSION OF HETEROLOGOUS GENES
9 <130> FILE REFERENCE: 16518.052
11 <140> CURRENT APPLICATION NUMBER: US 09/782,130
12 <141> CURRENT FILING DATE: 2001-02-12
14 <150> PRIOR APPLICATION NUMBER: US 09/232,861
15 <151> PRIOR FILING DATE: 1999-01-15
17 <150> PRIOR APPLICATION NUMBER: US 08/812,665
18 <151> PRIOR FILING DATE: 1997-03-07
20 <150> PRIOR APPLICATION NUMBER: US 08/484,941
21 <151> PRIOR FILING DATE: 1995-06-07
23 <150> PRIOR APPLICATION NUMBER: US 08/105,852
24 <151> PRIOR FILING DATE: 1993-08-10
26 <150> PRIOR APPLICATION NUMBER: US 07/526,123
27 <151> PRIOR FILING DATE: 1990-05-21
29 <150> PRIOR APPLICATION NUMBER: US 07/267,685
30 <151> PRIOR FILING DATE: 1988-11-02
32 <150> PRIOR APPLICATION NUMBER: US 06/692,605
33 <151> PRIOR FILING DATE: 1985-01-17
35 <150> PRIOR APPLICATION NUMBER: US 07/582,241
36 <151> PRIOR FILING DATE: 1990-09-14
38 <150> PRIOR APPLICATION NUMBER: US 07/188,361
39 <151> PRIOR FILING DATE: 1988-04-29
41 <150> PRIOR APPLICATION NUMBER: US 07/168,190
42 <151> PRIOR FILING DATE: 1988-03-15
44 <150> PRIOR APPLICATION NUMBER: US 07/054,369
45 <151> PRIOR FILING DATE: 1987-05-26
47 <150> PRIOR APPLICATION NUMBER: US 07/742,834
48 <151> PRIOR FILING DATE: 1991-08-08
50 <150> PRIOR APPLICATION NUMBER: US 07/550,804
51 <151> PRIOR FILING DATE: 1990-07-09
53 <150> PRIOR APPLICATION NUMBER: US 07/147,781
54 <151> PRIOR FILING DATE: 1988-01-25
56 <150> PRIOR APPLICATION NUMBER: US 07/078,538
57 <151> PRIOR FILING DATE: 1987-07-28
59 <150> PRIOR APPLICATION NUMBER: US 06/891,529
60 <151> PRIOR FILING DATE: 1986-07-31
62 <160> NUMBER OF SEQ ID NOS: 35
64 <170> SOFTWARE: PatentIn Ver. 2.1
66 <210> SEQ ID NO: 1
67 <211> LENGTH: 2200

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Input Set : A:\seqlst.txt
Output Set: N:\CRF4\11042002\I782130.raw

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69 <213> ORGANISM: Brassica napus
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74 ctaaagggtt ctggctgtt tcttggatcat atgatataact tctaaacttg tgtataaata 180
75 ttctctgaaa gtgcttctt tggcatatgt aggttggca aaaacgagga agatgtgttc 240
76 tcaatttgaa agatgtgaa cagccgaaga agaaaataag aataggcagt cctgtactc 300
77 aatggatctc agtctataac ggtcgtcgtc ccatgaaaca gaggtaacac atttttgca 360
78 tatacacttt gatagttcct cactaactgt gtaatctttt ggtagatatc actacaatgt 420
79 tggagagaca aggctgcgc agcatataca gaaggaaat gaagatggcc ttttatttag 480
80 ctgtgtgca tcagcagcta atctctgggc tctcatcatg gatgctggaa ctggattcac 540
81 ttctcaagtt tatgagggtt caccggctt cctacacaag gtaataatca gttgaagcaa 600
82 ttaagaatca atctgattt tagtaaacta agaagaactt accttatgtat ttccccgcag 660
83 gactggatta tggaaacaat gggaaaagaac tactatataa gctccatagc gggttcagat 720
84 aacgggagct cttaggtt tatgtcaaaa ggttagtgtt tagtgaataa taaacttatt 780
85 atcaaaaagt cttcattgac ttatttatat acttgggtgt aattggtagg aactacttat 840
86 tctcagcagt catabaaatg ggtgactca ttccattca agtggataaa taagaaatgg 900
87 aaagaagatt ttcatgtaac ctccatgaca actgctggta atcggtggg tgggtgaaatg 960
88 tcgaggaact ctggctctc tgatcaggtt ggttttgc tcttatttgc tgggtttttt 1020
89 attttccctt gatagctaa tatgataaac tctgcgtgtt gaaagggtgtt ggagcttgac 1080
90 ttttgtacc caagcgatgg gatacatagg aggtggaga atgggtatag aataacatca 1140
91 atggcagcaa ctgcggatca agcagcttc atattaagca taccaaagcg taagatgg 1200
92 gatgaaactc aagagactct ccgcaccacc gccttccaa gtactcatgt caagggtgtt 1260
93 ttcttagct ttgaacacag atttggatct ttttggatgtt ttccatata cataggac 1320
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97 gtaaaaaccag acgcgtctc ttgggtgaa tggatgtgtt tgggtatgtt 1560
98 tgtacgaga acaaaagaga agatgtcaattt ggttagtataa aagatttgag agcttttaa 1620
99 agcccttcaa gtgtgtgtt ttatcttattt gatatcatcc atttgcgtt ttaatgcgt 1680
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103 gtaatgact tggactat gttctgaattt ctcattaaat ttttattttt tgaagttaa 1920
104 gtttttaccc tttttttga aaaatatctt tcataagatg tcacggcagg acatgagcta 1980
105 cacatcacat attagcatgc agatgcggac gatttgcac tcacttcaaa caccctaaag 2040
106 agcttctctc tcacagcaca cacatatac catgtcaat ttacacgtga tcggccatgca 2100
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112 <211> LENGTH: 4324
113 <212> TYPE: DNA
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116 <220> FEATURE:
117 <221> NAME/KEY: CDS
118 <222> LOCATION: (2152)..(2703)
120 <220> FEATURE:
121 <221> NAME/KEY: modified_base

RAW SEQUENCE LISTING

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Input Set : A:\seqlst.txt

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 123 <223> OTHER INFORMATION: a, c, t, g, other or unknown
 125 <220> FEATURE:
 126 <221> NAME/KEY: modified_base
 127 <222> LOCATION: (3716) /
 128 <223> OTHER INFORMATION: a, c, t, g, other or unknown
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 131 <221> NAME/KEY: modified_base /
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 133 <223> OTHER INFORMATION: a, c, t, g, other or unknown
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 137 <222> LOCATION: (3803) /
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 143 ctttcgata ctctaattga gccgtgcgt ctatctagac caattagaat ttagtggagct 120
 145 ctaaagggtt ctggctgttt tcttggatcat atgattaact tctaaacttgc tgataaata 180
 147 ttctctgaaa gtgcgtcttt tggcatatgt aggttggca aaaacgagga agattgcttc 240
 149 tcaatttggaa agaggatgaa cagccgaaga agaaaataag aataggcagt cctgctactc 300
 151 aatggatctc agtctataac ggtcgctcgcc ccatgaaaca gaggtaaaac atttttgc 360
 153 tatacacttt gaaaggccct cactaactgt gtaatctttt ggttagatatc actacaatgt 420
 155 cggagagaca aggctgcgcc agcatataca aaaggaaat gaagatgcc ttttgattag 480
 157 ctgtgttagca tcagcagcta atctctggc tctcatcatg gatgctggaa ctggattcac 540
 159 ttctcaagtt tatgagttgt caccggctt cctacacaag gtaataatca gttgaagcaa 600
 161 ttaagaatca atttgatttg tagtaaaacta agaagaactt accttatgtt ttccccgcag 660
 163 gactggatta tggacaatg ggaaaagaac tactatataa gctccatagc tgggtcgat 720
 165 aacgggagct cttagttgt tatgtcaaaa ggttagtgtt tagtgaataa taaactata 780
 167 ccacaaagtc ttcatgtact tatttatata cttgtgtga attgcttagga actacttatt 840
 169 ctcagcagtc atacaaatgt agtgactcat ttccgttcaa gtggataaaat aagaaatgg 900
 171 aagaagattt tcatgttaacc tccatgacaa ctgctggtaa tcgttgggt gtggtaatgt 960
 173 cgaggaactc tggctctct gatcaggtag gttttgtct cttattgtct ggtgtttta 1020
 175 ttttccctgt atagtcataat atgataaaact ctgcgttgcgaa aaaggtgttgc gagcttgact 1080
 177 ttttgcgttcc aagcgatggg atacatagga ggttggagaa tgggtataga ataacatcaa 1140
 179 tggcagcaac tgcggatcaa gcagcttca tattaagcat accaaagcgt aagatggtg 1200
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 201 atctatcaca ctagaaaaaa acatttcttc aaggttgcgaa tgcgttgcgaa aatatttgc 1860
 203 ttctcattaa gtttttattt tgcgttgcgaa tgcgttgcgaa tgcgttgcgaa aatatttgc 1920
 205 gttcataaga tgcgttgcgaa ggcacatgagc tacacatgcg acatagcatg cagatcagga 1980
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209 atgcaatatt tacacgtgat cgccatcaa atctccattc tcacctataa attagagcct 2100
211 cggcttcact cttaactcaa accaaaactc atcactacag aacatacaca a atg gcg 2157
212 Met Ala
213 1
215 aac aag ctc ttc ctc gtc tcg gca act ctc gcc ttg ttc ttc ctt ctc 2205
216 Asn Lys Leu Phe Leu Val Ser Ala Thr Leu Ala Leu Phe Phe Leu Leu
217 5 10 15
219 acc aat gcc tcc gtc tac agg acg gtt gtg gaa gtc gac gaa gat gat 2253
220 Thr Asn Ala Ser Val Tyr Arg Thr Val Val Glu Val Asp Glu Asp Asp
221 20 25 30
223 gcc aca aat cca gcc ggc cca ttt agg att cca aaa tgt agg aag gag 2301
224 Ala Thr Asn Pro Ala Gly Pro Phe Arg Ile Pro Lys Cys Arg Lys Glu
225 35 40 45 50
227 ttt cag caa gca caa cac ctg aaa gct tgc caa caa tgg ctc cac aag 2349
228 Phe Gln Gln Ala Gln His Leu Lys Ala Cys Gln Gln Trp Leu His Lys
229 55 60 65
231 cag gca atg cag tcc ggt agt ggt cca agc tgg acc ctc gat ggt gag 2397
232 Gln Ala Met Gln Ser Gly Ser Gly Pro Ser Trp Thr Leu Asp Gly Glu
233 70 75 80
235 ttt gat ttt gaa gac gac gtg gag aac caa caa cag ggc ccc cag cag 2445
236 Phe Asp Phe Glu Asp Asp Val Glu Asn Gln Gln Gln Gly Pro Gln Gln
237 85 90 95
239 agg cca ccg ctg ctc cag cag tgc tgc aac gag ctc cac cag gaa gag 2493
240 Arg Pro Pro Leu Leu Gln Gln Cys Cys Asn Glu Leu His Gln Glu Glu
241 100 105 110
243 cca ctt tgc gtt tgc cca acc ttg aaa gga gca tcc aaa gcc gtt aaa 2541
244 Pro Leu Cys Val Cys Pro Thr Leu Lys Gly Ala Ser Lys Ala Val Lys
245 115 120 125 130
247 caa cag att cga caa caa cag gga caa caa atg cag gga cag cag atg 2589
248 Gln Gln Ile Arg Gln Gln Gly Gln Gln Met Gln Gly Gln Gln Met
249 135 140 145
251 cag caa gtg att agc cgt atc tac cag acc gct acg cac tta cct aga 2637
252 Gln Gln Val Ile Ser Arg Ile Tyr Gln Thr Ala Thr His Leu Pro Arg
253 150 155 160
255 gct tgc aac atc agg caa gtt agc att tgc ccc ttc cag aag acc atg 2685
256 Ala Cys Asn Ile Arg Gln Val Ser Ile Cys Pro Phe Gln Lys Thr Met
257 165 170 175
259 cct ggg ccc ggc ttc tac tagattccaa acgaatatcc tcgagagtgt 2733
260 Pro Gly Pro Gly Phe Tyr
261 180
263 gtataccacg gtgataatgag tgggttgg tggatgtttt aacactacat agtcatggtg 2793
265 tggatgtttt aaataatgtt ctaatgtt aagaactact ccgttagacgg taataaaaga 2853
267 gaagtttttt ttttactct tgctactttc ctataaagtg atgatataaca acagatacac 2913
269 caaaaagaaa acaattaatc tatattcaca atgaagcgt actagtctat tgaacatgtc 2973
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273 ccaatggat ccaacaaaga ctcaaatctg gtttgatca gatacttcaa aactatttt 3093
275 gtattcattt aattatgcaa gtgttctttt atttggtaaa gactctttag aagcaaagaa 3153
277 cgacaagcag taataaaaaa aacaaagtcc agtttaaga ttgttattt acttattgtc 3213
279 attgaaaaa tatagtatga tattatata gtttattta tataatgtt gtctattcaa 3273

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 283 tcaaacatat gataagatgg tcaaattgatt atgagtttg ttatattacct gaagaaaaaga 3393
 285 taagttagct tcgagttct gaagggtacg tgatcttcat ttcttggcta aaagcgaata 3453
 287 tgacatcacc tagagaaagc cgataatagt aaactctgtt cttgggtttt ggtaatca 3513
 289 aaccgaaccg gtagctgagt gtcaagttag caaacatcgc aaaccatatg tcaattcggt 3573
 291 agattcccggtttaagttgt aaaccggat ttcatatgtt gaaaacccta gaagccagcc 3633
 W--> 293 ancctttta atctaatttt tgcaaacgag aagtaccac acctctccac taaaaccctg 3693
 W--> 295 aaccttactg agagaagcag agncannaaa gaacaaataa aacccgaaga tgagaccacc 3753
 W--> 297 acgtgcggcg ggacgttcag gggacgggga ggaagagaat grggcggmn tttggtggcg 3813
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 303 cgaatcttat tcttgcctcg ctgcgttgc taccgataaa gcttaagact ttattgataa 3993
 305 agttctcagc tttgaatgtg aatgaactgt ttccgtctta ttgtgttcc ttgttttga 4053
 307 gttgaatcac tgcgttagca cttttgttag attcatctt gtgttaagt taaaaggtag 4113
 309 aaactttgtg acttgcctcc gttatgacaa ggttaactt gttggatata acagaagttg 4173
 311 cgacctttct ccatgcttgc gagggtgtat ctgtggacca agctctca ggcgaagatc 4233
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 319 <211> LENGTH: 184
 320 <212> TYPE: PRT
 321 <213> ORGANISM: Brassica rapa
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 325 1 5 10 15
 327 Leu Leu Thr Asn Ala Ser Val Tyr Arg Thr Val Val Glu Val Asp Glu
 328 20 25 30
 330 Asp Asp Ala Thr Asn Pro Ala Gly Pro Phe Arg Ile Pro Lys Cys Arg
 331 35 40 45
 333 Lys Glu Phe Gln Gln Ala Gln His Leu Lys Ala Cys Gln Gln Trp Leu
 334 50 55 60
 336 His Lys Gln Ala Met Gln Ser Gly Ser Gly Pro Ser Trp Thr Leu Asp
 337 65 70 75 80
 339 Gly Glu Phe Asp Phe Glu Asp Asp Val Glu Asn Gln Gln Gln Gly Pro
 340 85 90 95
 342 Gln Gln Arg Pro Pro Leu Leu Gln Gln Cys Cys Asn Glu Leu His Gln
 343 100 105 110
 345 Glu Glu Pro Leu Cys Val Cys Pro Thr Leu Lys Gly Ala Ser Lys Ala
 346 115 120 125
 348 Val Lys Gln Gln Ile Arg Gln Gln Gly Gln Gln Met Gln Gly Gln
 349 130 135 140
 351 Gln Met Gln Gln Val Ile Ser Arg Ile Tyr Gln Thr Ala Thr His Leu
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 355 165 170 175
 357 Thr Met Pro Gly Pro Gly Phe Tyr
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 361 <210> SEQ ID NO: 4
 362 <211> LENGTH: 2154

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/04/2002
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#: 2; N Pos. 3635, 3716, 3719, 3720, 3803

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L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:3633

L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:3693

L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:3753